



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,066	08/09/2006	Nicholas Leo Weatherby	0126-028P/FLS	4274
22831 7590 10/31/2007 SCHWEITZER CORNMAN GROSS & BONDELL LLP 292 MADISON AVENUE - 19th FLOOR NEW YORK, NY 10017			EXAMINER BODAWALA, DIMPLE N	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 10/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,066

Applicant(s)

WEATHERBY ET AL.

Examiner

Dimple N. Bodawala

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 22-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 22 is rejected because claim 22 discloses structural claimed limitations such as "the heated layer of composite material" in lines 6-7, "the structural member" in line 6, "the hot gas" in line 8, and "the opposite side of the layer of the composite material" in lines 9-10. Claim 22 is independent claim of the application, wherein claim 22 does not teach or suggest such structural limitations earlier, therefore these limitations lack sufficient antecedent basis in the claim, and further make the scope of the claim indeterminate.

5. Claim 22 is vague and indefinite because it is unclear about the claimed limitation such as “the layer” in line 9, wherein claim 22 comprises two types of layer such as “the layer of the composite material” and “the heated layer of the composite material”. Therefore, claimed limitation “the layer” is confused by having multiple layers, and further makes the scope of the claim indeterminate.

6. Claim 26 is vague and indefinite because it is unclear about which member with the further heating means also acts as support means. Claim 26 is depended on claim 25, wherein claim 25 discloses “the inner member” and “the outer member”, therefore the claim limitation “the member” is confused by having multiple members and further makes the scope of the subject matter indeterminate.

7. Claim 27 is rejected because claim 27 discloses claimed limitation such as “the inside” in line 3. There is insufficient antecedent basis for the claimed limitation because claim 27 is depended on claim 25, wherein claim 25 does not teach or suggest that the layer of the composite material is heated from the inside.

8. Claim 29 is rejected because claim 29 discloses claimed limitation such as “the outside” in line 3. There is insufficient antecedent basis for the claimed limitation because claim 29 is depended on claim 25, wherein claim

25 does not teach or suggest that the layer of the composite material is heated from the outside.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 22, 25-35, 39, and 40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 and 15-17 of copending Application No. 10/380,370 (U S Publication Application No. 2004/0036202) in view of Miyazaki et al. (JP 01016632).

11. U S Publication Application No. 2004/0036202 discloses all claimed structural limitations of claims 22,25-35,39 and 40 of the instant application, but fails to disclose a further heating means.

12. In the analogous art, Miyazaki et al. discloses lining technique for pipeline (duct) which comprises a plastic pipe (1) is heated uniformly in the direction of the thickness thereof by the heating means (2,5) from the inside and outside of the same, wherein the heating means (2) is disposed in the inner side of the pipe, and the further heating means (5) is surrounded to the heating means (8) (See figure 1).

13. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of co-pending Application 10/380,370 by providing the further heating means because such an alignment is involved to heat the pipe which comprises a liner with a layer of composite material uniformly in the direction of the thickness (See abstract) as suggested by Miyazaki.

14. This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

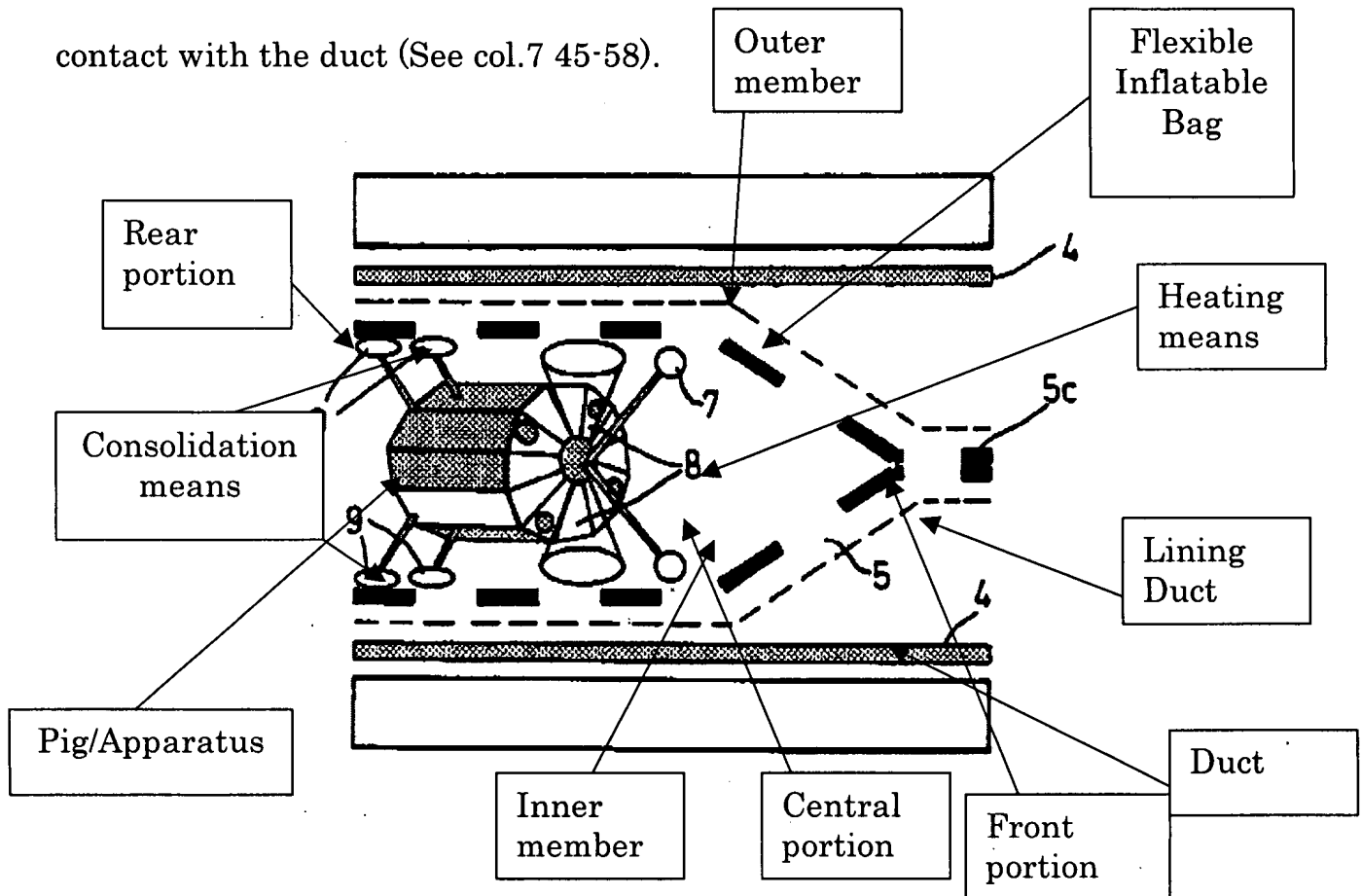
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 22-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce (U S Patent No. 6,228,312) in view of Miyazaki et al. (JP 01016632).

19. Boyce ('312) discloses a lining pipe as a lining duct having a flexible liner (5), wherein liner (5) including a layer of composite material comprising thermoplastic material and reinforcing fibers (See abstract) into a structural member within a duct (4), duct (4) comprises a front portion, a rear portion and a central portion, wherein a front portion adapted to be inserted in liner, a central portion having heating means (8) on one side of the layer of the composite material, and a rear portion having consolidation means (9) for forcing the layer of the composite material toward the duct (4) for consolidation and cooling under pressure for forming a structural member (See figure 3, col.4 lines 46 through col.5 lines 20). It further discloses the heating means (8) for producing pressurized hot gas, the central portion being so constructed and arranged to force the hot gas under pressure through the layer of composite material to heat the layer, and to provide an air gap on the opposite side of the layer of composite material while heating takes place (See figure 3, col.7 lines 38-51). It further teaches that the liner (5) includes an outer thermoplastic layer between the duct (4) and the composite layer (See col.2 lines 44-64).

21. It further teaches that the unheated compress air is used as the consolidation means forcing the heated layer of the composite material into contact with the duct (See col.7 45-58).



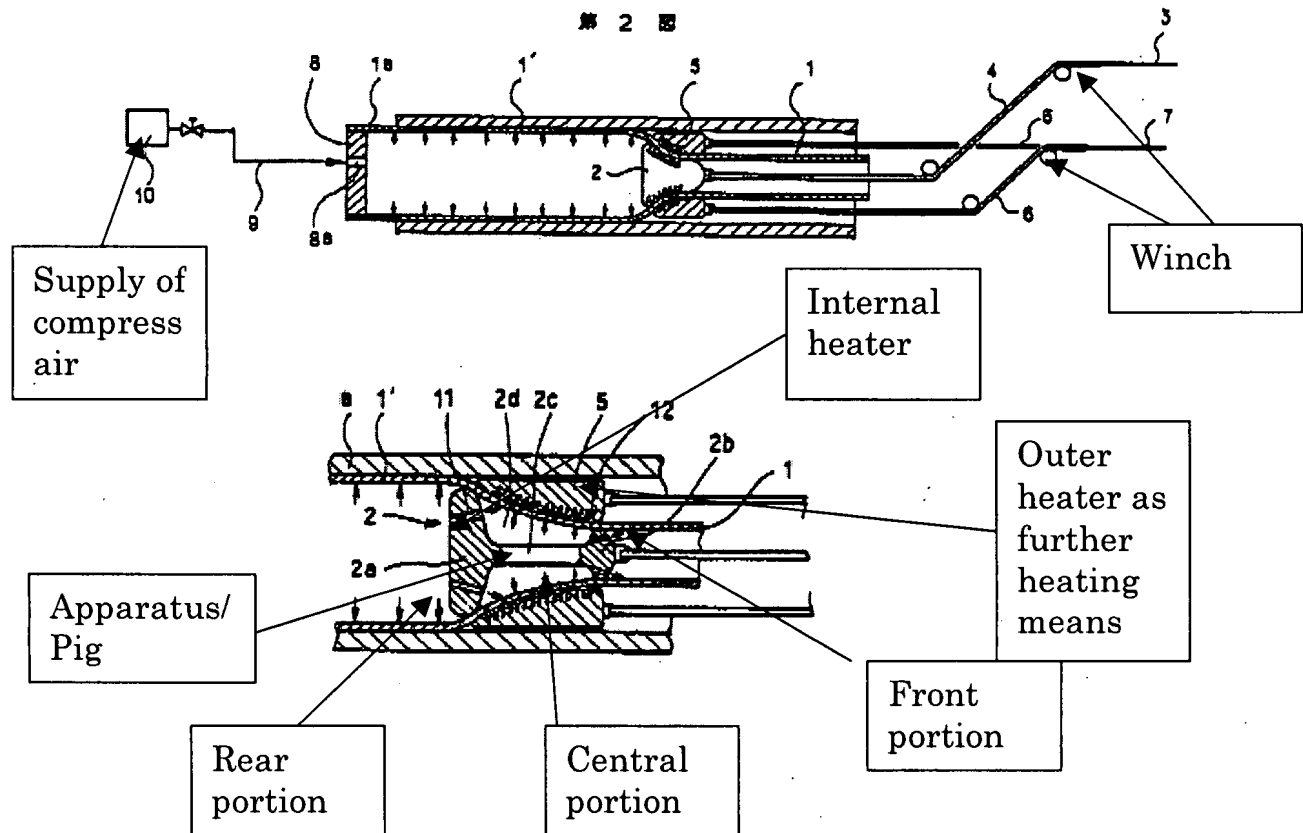
22. It further teaches that the compressed air inflates a flexible bag means (10) which acts on the layer of composite material, wherein the bag (10) attached to the central portion, and expanded from the rear, unrolling as it

does so (See col.7 lines 59-62, col.8 lines 52-60). It further teaches that the bag (10) is made of plastic, which is silicon-based material (See col.5 line 32). It further teaches that the latter involves inserting a pipe liner is fabricated from PVC (See col.1 lines 30-32), which can be understandable that the bag is of PVC.

23. Boyce ('312) discloses all claimed structural limitations as discussed above but fails to teach or suggest a further heating means and a winch.

24. In the analogous art, Miyazaki et al. discloses lining techniques for pipeline which comprises a pipe with liner, wherein liner is made of layer of composite material having front (2b), central (2c+2d), and rear portion (2a) (See figure 3). It further comprises an apparatus having a heating pig (2) and tubular heater (5), wherein the tubular heater (5) as a further heating means disposed in the outer member of the lining pipe, and the heating pig (2) as a heating means is disposed in the inner side member. It further teaches that the pipe (1) is heated by a inner heating means (2) and outer heating means (5), wherein the pipe (1) is heated uniformly in the direction of the thickness thereof by the heating from inside and outside under compression (See abstract). It could be understandable that the tubular heating means (5) as a further heating means is passive and active heating device containing heating elements. It further teaches that the hot gas is directed from the air

gap (shown as arrows in figures) forwardly to provide pre-heating of the liner at the front portion (2b), wherein the hot gas is produced by heating a supply of compressed air (10) (See abstract). It further teaches that the compressed air and the power for the heating means are supplied through the line (6,7,8a, 9,10) attached to the apparatus.



25. Furthermore, figures 1 and 2 teach the apparatus which is moved along the duct (4) by being winched from its front portion (2b).

26. Furthermore, claims 36-38 recite claimed limitations of a content, such as Flexible bag, but fail to further limit of the subject matter such as a liner conversion apparatus, wherein these claims treat as an intended use, which is given no patentability weight.

27. Furthermore, claim 32 cited claimed limitation such as “unheated compressed air” which is defined as an intended use for the consolidation means. As we know that the claim which is involved as an intended use, is given no patentability weight.

28. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus satisfying the claimed structural limitation, *Ex parte Masham*, 2 USPQ2d 1647.

29. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the invention of Boyce (312) by providing a further heating means because such an alignment is involved to heat the pipe from the outside uniformly in the direction of the thickness (See abstract) as suggested by Miyazaki et al. (JP 01016632).

30. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Boyce ('312) by providing a winch in the front portion of the duct because such an alignment is involved to move the apparatus along the duct during the operation as suggested by Miyazaki et al. (JP 01016632).

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTOL-892 for lining duct).

32. *Renaud (U S Patent No. 4,671,840)* comprises a liner conversion apparatus having heating means (12-15), wherein first heating means is disposed in the inner member of the lining duct and another heating means is disposed in the outer member of the lining duct, wherein the outer heating means having heating elements is provide air gap between inner and outer member for passing through the hot air during the process.

33. *Pollock et al. (U S Patent No. 3,080,269)* comprises a lining duct having a flexible bag (14).

34. *Kinumoto et al. (U S Patent No. 4,950,446)* discloses a liner conversion apparatus having a heating means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimple N. Bodawala whose

telephone number is (571) 272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNB


YOGENDRA N. GUPTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700